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## DEPARTMENTS IN THE FACULTY AND COURSES OFFERED

### ARCHITECTURE, PLANNING AND GEOMATICS

The School offers the following postgraduate degree programmes:

**Architecture**  
**Geomatics**  
**Landscape Architecture**  
**City and Regional Planning**  
**Urban Design**

The Architecture and Planning division of the School is situated in the Centlivres Building on the Upper Campus, fronting onto University Avenue. The Geomatics division is located on level 5 of the Menzies Building.

### Staff

#### Professor and Director

T Berlanda, Dipl Arch, *USI*, PhD (Arch & Design) *Turin*

#### Professors

I Low, BArch *Cape Town* MArch(Urban Design) *Penn* PrArch MIArch CIA

E Pieterse, BA(Hons) *UWC* MA Development Studies *ISS* PhD *LSE*

V Watson, BA(Hons) *Natal* MCRP *Cape Town* AA Dip *London* PhD *Witwatersrand* MSAPI SACAP

#### Emeritus Professors

D Dewar, BA(Hons) MURP PhD *Cape Town* TRP(SA) MSAPI BP Chair of Urban and Regional Planning

H R  ther, Dipl-Ing *Bonn* PhD *Cape Town* PrS(SA) FRSSAf FSAAE

#### Associate Professors

N Coetzer, BArch *Natal* MArch *Denver* PhD *London*

N Odendaal, NDip(TRP) *ML Sultan* BA *UNISA* MTRP *UND* PhD *Witwatersrand* RTP1

JL Smit, BSc(Surv) PhD *Cape Town*, PS PS(ph) PGP (SA)

A Steenkamp, BArch MArch *Pretoria* PhD *Delft* PrArch

JF Whittall, BSc(Surv) MSc(Eng) *Cape Town*, PhD *Calgary* PrL(SA) MSAGI

T Winkler, BSc(TRP) MUD *Witwatersrand* PhD *British Columbia*

#### Emeritus Associate Professor

CL Merry, BSc(Surv) *Cape Town* PhD *New Brunswick* FAIG

#### Senior Lecturers

F Carter, BAS BArch MPhil *Cape Town* PrArch PRCPM MIA RIBA

K Ewing, BAS BArch *Cape Town* PhD *Glasgow*

K Fellingham, BArch *Witwatersrand* SM ArchS *MIT* PrArch (SA) ARB (UK) RIBA (UK)

C Hindes, BLA *Pretoria* MLArch

S Hull, BSc(Surv) *Kwazulu Natal* MSc(Eng) *Cape Town* PGCE *UNISA* PrL(SA)

F Isaacs, BArch *Cape Town* MIP *Stuttgart*

T Katzschner, BSocSc MCRP *Cape Town*

M Louw, BArch *Pretoria* MPhil *Stellenbosch* PrArch(SA) MIArch

P Odera, BSc(Surv) MSc (Surv) *Nairobi* PhD (Earth and Planetary Sciences) *Kyoto*

SS Papanicolaou, BArch MPhil *Cape Town*

T Sanya, BArch *Makerere MIP Stuttgart PhD Oslo*

G Sithole, BSc(Surv)(Hons) *Zimbabwe MSc IGP ITC(NL) PhD TU Delft(NL) LSZ Zimbabwe*

P Tumubweinee, BSc(Arch) *Witwatersrand Honors Witwatersrand M.Arch Pretoria*

**Adjunct Senior Lecturer**

N Roux, BFA *Rhodes MA Witwatersrand PhD Birkbeck*

**Lecturers**

C Abrahams, ND Arch *PTech BTech(Architecture) CPUT MArch(Prof) UCT*

S Le Grange, BArch *Cape Town M Urban Design UC Berkeley*

K Singh, BSc Land Surveying, MSc Land Surveying, *Kwazulu Natal*

S Spamer, BAS *Cape Town, B.Arch Cape Town*

M Toffa, BAS BArch *Cape Town MSc Architecture Leuven*

**Part-Time Lecturers**

R Cronwright, BA MC & RP MBA *Cape Town TRP(SA) MSA/TRP*

T Klitzner, BArch *Cape Town MLA Penn*

**Honorary Researcher**

H Wolff, BSc(Arch) *Pretoria BArch Cape Town*

**Principal Technical Officer**

J Coetzee, NHD (Building Tech)

D Matthee, NHD (Mechanical Eng) ND (Surveying)

**Chief Technical Officer**

M Wells

**Departmental Manager**

J Meyer

**Photographic Technician**

N Stanley

**Administrative Officers**

N Davids

M Joubert

**Administrative Assistants**

N Gihwala

N Pickover

M Waglay

**Senior Secretaries**

J Abrahams

M Mdluli

**Print Room Manager**

T Swarts

**Departmental Assistant**

C Ohlson

**Laboratory Assistant**  
S Schroeder

**Technical Assistant**  
S Matthews

**IT Liaison**  
L Coetzee

## Postgraduate Programmes

## Honours Programmes

### Bachelor of Architectural Studies Honours [EH006APG01]

**Programme Convener:**  
TBC

An honours degree in architecture that provides students with advanced vocational and discipline specific knowledge, skills and competencies related to the history, theory, technology and practice of architecture. The course of study extends the base of knowledge of the student through graduate study with particular emphasis on architectural design. It is focused on developing creative and critical inquiry, reflective understanding and cultural, social and technical knowledge in preparation for self-motivated independent learning. The qualification introduces an honours degree within a succession of qualifications leading towards professional qualification in architecture. It is a prerequisite qualification for admission into the Master of Architecture (Professional).

#### Studio work Courses

Code	Course	NQF Credits	HEQSF Level
APG4042F	Architectural Design Studio I .....	48	8
APG4043S	Architectural Design Studio II .....	48	8

#### Non-Studio Courses

The following courses are compulsory:

Code	Course	NQF Credits	HEQSF Level
APG4039F	Advanced History & Theory of Architecture .....	12	8
APG4041S	Advanced Building Technology .....	12	8
APG4044S	Professional Practice .....	12	8
APG4048S	Architecture Research Method & Project .....	12	8
	Elective core courses .....	24	8
	<b>Total credits .....</b>	<b>168</b>	

#### Elective Core Courses (select 24 credits)

Select two 12-credit elective for the First Semester from the following: (see note below)\*

Code	Course	NQF Credits	HEQSF Level
APG4021F	Urban Infrastructure .....	12	8
APG4028F	Aspects of City Design .....	12	8
APG4029F	Natural Systems .....	12	8
APG5025F	History and Theory of Landscape Architecture II .....	12	9
APG4049F	Aspects of History & Theory I .....	12	8
APG4056F	Aspects of History & Theory II .....	12	8

Code	Course	NQF Credits	HEQSF Level
APG4058F	Special Topics in Architecture and Urban Studies.....	12	8
	*Approved elective.....	12	0

\*Or any 12 credit course presented at honours level, approved by the Programme Convener.

\*Note: APG4042F *Architectural Design Studio I* is a pre-requisite for APG4043S *Architectural Design Studio II* in the second semester.

## **Bachelor of Landscape Architecture Honours [EH008APG06]**

### **Programme Convener:**

C Hindes, BLA *Pret* MLArch

An Honours degree in Landscape Architecture that provides students with advanced vocational and discipline-specific knowledge, skills and competencies related to the practice of landscape architecture, including landscape and urban design, history and theory, digital representation techniques and constructed ecology. The course of study extends the base of knowledge of the student through graduate study with particular emphasis on landscape design. It is focused on developing creative and critical inquiry, reflective understanding and cultural, social and technical knowledge in preparation for self-motivated independent learning. The qualification introduces an honours degree within a succession of qualifications leading towards professional qualification in landscape architecture. It is a pre-requisite qualification for admission into the Master of Landscape Architecture.

### **Studio work Courses**

Studio work, the central activity of the degree programme, requires students to exercise considerable initiative and undertake research, and consumes up to two-thirds of the students time allocation to the Programme. Projects are selected for both academic and professional relevance and will start at the smaller scale and work steadily towards the comprehension of larger and larger natural and urban systems. Fieldwork is an indispensable component of each project and involves trips into Metropolitan Cape Town and selected parts of the Western Cape region. Each project culminates in the submission of a document and an oral presentation. Assessment is based on a variety of project products and a Studio work examination held at the end of each semester.

### **Lecture Courses**

Lecture courses focus on imparting values, knowledge, and skills of relevance to landscape architecture. Landscape skills and techniques are developed progressively throughout the duration of the study programme. Theory courses are accompanied by extensive reading lists and students are expected to undertake extensive structured reading. The courses are assessed through term papers, practicals, seminars and other forms of examination.

This curriculum must be read together with the Degree Rules in the General Information section of this Handbook. Each student must complete all of the courses.

### **First Semester**

Code	Course	NQF Credits	HEQSF Level
APG4028F	Aspects of City Design.....	12	8
APG4054F	Landscape Systems Analysis.....	20	8
APG4031F	Landscape Representation.....	12	8
APG4036F	Landscape Architecture Studio I.....	16	8
APG4057F	Landscape Architecture Studio II.....	16	8

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### Second Semester

Code	Course	NQF Credits	HEQSF Level
APG4030S	History & Theory of Landscape Architecture I.....	12	8
APG4032S	Constructing Landscape Systems .....	20	8
APG4037S	Landscape Architecture Studio III.....	32	8
APG4047S	Plants & Design.....	12	8
	Total first year credits.....	152	

Students who do not have a design background must apply for the Introduction to Spatial Design short course (EZ002APG02), which is offered by the Continued Professional Development unit in the faculty. It is a 4-week, 5-days-a-week intensive workshop that provides an experiential snapshot of the design studio and its thinking, while developing core skills required for studying landscape architecture and urban design at a post-graduate level. The programme is run in an intense and immersive 4-week block before the start of the academic year. Each week will be run by a different design teacher and will have a different approach.

### Bachelor of City Planning Honours [EH009APG03]

#### Associate Professor and Programme Convener:

N Odendaal, NDip(TRP) *ML Sultian* BA *UNISA* MTRP *UND* PhD *Witwatersrand* RTPI

The BCP(Hons) degree consist of either one year of full-time study or a two- year extended programme. The extended programme is not 'part-time' in the usual meaning of the term. Rather, it enables candidates to undertake the Honours degree first year of study over two years, by attending theory only in the first year and studio work only in the second year. The material covered in the one year full-time and the two-year extended programme is precisely the same. The curriculum comprises of courses in theory and project work. However, because a great deal of both project and theory work is self- or group-initiated, and is innovative in form, more than half of the content of the BCP(Hons) and MCRP degree programmes can be described as research related.

Projects are selected for both academic utility and professional relevance and are carried out by students under staff supervision. The studio is a vehicle for exploration into development and planning in real situations. The programmes require considerable field work in the Cape Town area and in some cases field trips to other parts of the country are arranged. Each project culminates in the submission of a document and the oral presentation of project work. Assessment is based on project products. Theory courses are concerned with procedural and substantive theory. Planning skills are imparted and honed throughout the duration of the programmes.

#### Studio work Courses

Code	Course	NQF Credits	HEQSF Level
APG4022F	Planning Project A.....	32	8
APG4026S	Planning Project B.....	32	8

#### Non-Studio Courses

The following courses are compulsory:

Code	Course	NQF Credits	HEQSF Level
APG4020F	Planning Theory & Practice.....	8	8
APG4021F	Urban Infrastructure .....	12	8
APG4028F	Aspects of City Design .....	12	8
APG4029F	Natural Systems.....	12	8
APG4035F	Planning Techniques I.....	12	8
APG4023S	Urban Economic Development Processes.....	12	8
APG4024S	Planning & Governmental Systems.....	12	8
APG4025S	Regulatory & Legal Framework.....	12	5

Code	Course	NQF Credits	HEQSF Level
APG4038S	Planning Techniques II.....	12	8
	Total credits.....	168	

## **BSc(Hons) in Geographical Information Systems [EH001APG07]**

### **Programme Convener:**

SA Hull B.Sc(Surv) *UKZN* MSc(Eng) *Cape Town* PGCE *Unisa*

The curriculum of the BSc(Hons) in Geographic Information Systems programme is aimed at graduates intending to work in disciplines associated with the natural, geographical and computer sciences. The degree is intended to equip graduates with the practical skills and theoretical knowledge they need to incorporate GIS techniques in their every day work routine.

A candidate shall complete approved courses of a value required to bring the total to a minimum of 144 credits and shall comply with all the prescribed curriculum requirements.

### **Core Courses**

Code	Course	NQF Credits	HEQSF Level
APG2018X	GIS Camp.....	4	6
APG3012S	Geomatics III.....	24	7
APG4050W	Geo-Informatics Project.....	40	8
APG4007F	Introductory GIS.....	24	8
APG4008S	Advanced GIS.....	24	8
APG4009F	Computing for GIS.....	18	8
APG4012S	Geomatics Management & Professionalism.....	24	8
	Total Credits.....	158	

## **Master's Programmes**

### **Master of Architecture [EM006APG01]**

#### **Professor and Programme Convener:**

I Low, BArch *Cape Town* MArch(Urban Design) *Penn* PrArch MIA Arch CIA

The Master of Architecture degree may be awarded to a candidate who shall present a dissertation incorporating any or all of the following:

- |   |
|---|
| <ul style="list-style-type: none"> <li>a) a research project of a theoretical or practical nature;</li> <li>b) a critical review of a specified topic based upon a comprehensive search of literature or available data;</li> <li>c) design of all or part of an architectural project or group of projects to a specification involving advanced concepts and theoretical principles;</li> <li>d) design of all or part of an architectural project or group of projects to a specification involving advanced concepts and theoretical principles;</li> <li>e) any other study acceptable to the Faculty of Engineering and the Built Environment.</li> </ul> |
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**Master of Architecture (Professional)**  
**[EM021APG01]**

**Programme Convener:**  
 TBA

A qualifying degree in architecture that provides students with the knowledge, values and skills to enter the profession of architecture and/or to pursue further qualifications in architecture or fields associated with the architectural profession and built environment. It is focused on developing independent critical enquiry in preparation for practice in a diverse and changing world. Students are given considerable freedom and support to develop a reflective, critical and speculative relationship to their work. The qualification introduces a master's degree within a succession of qualifications leading towards professional qualification in architecture. It is a prerequisite qualification for statutory registration as a Candidate Architect with the South African Council for the Architectural Profession (SACAP), in terms of the Architectural Professions Act 2000 (Act No 44 of 2000). To attain registration as Professional Architect, the candidate must complete a two-year period of practical experience in an architectural office and pass a registration exam set by SACAP.

*NOTE: These rules must be read with the general rules for Master's degrees in Handbook 3 of this series.*

**Design Dissertation - Year Course**

Studio work Course

Code	Course	NQF Credits	HEQSF Level
<b>APG5079W</b>	Dissertation Design.....	120	9

**Non-Studio Courses**

Code	Course	NQF Credits	HEQSF Level
<b>APG5088Z</b>	Theory and Technology Studies .....	60	9
	Total credits per year .....	<b>180</b>	

**Master of City and Regional Planning [EM031APG03]**

City and Regional Planning is a recognised profession under the Planning Professions Act of 2003. It is a designated scarce skill in terms of the South African Government's Joint Initiative for Priority Skills Acquisition (JIPSA) as part of its accelerated economic growth programme. It responds to environmental, infrastructural and socio-economic priorities at national, provincial and local levels of governance.

The primary purpose of the Master's degree is to build on the Bachelor of City Planning Honours by expanding the learners' conceptual knowledge and skills to regional planning, to advanced environmental assessment, and to do in-depth research in the form of a 120 credit dissertation. It comprises theory courses, project work and a dissertation.

This is the degree necessary to enable professional qualification as a city and regional planner.

**Master of City and Regional Planning**  
**[EM031APG03]**

**Programme Convener:**

N Odendaal, NDip(TRP) *ML Sultan* BA *UNISA* MTRP *UND* PhD *Witwatersrand* RTPI

City and Regional Planning is a recognised profession under the Planning Professions Act of 2003. It is a designated scarce skill in terms of the South African Government's Joint Initiative for Priority

Skills Acquisition (JIPSA) as part of its accelerated economic growth programme. It responds to environmental, infrastructural and socio-economic priorities at national, provincial and local levels of governance.

The primary purpose of the Master's degree is to build on the Bachelor of City Planning Honours by expanding the learners' conceptual knowledge and skills to regional planning, to advanced environmental assessment, and to do in-depth research in the form of a 120 credit dissertation. It comprises theory courses, project work and a dissertation.

This is the degree necessary to enable professional qualification as a city and regional planner.

This curriculum must be read together with the Degree Rules in the General Information section of this Handbook. Candidates for the MCRP degree are required to complete the core courses listed below, totaling 184 credits.

#### First Semester

Code	Course	NQF Credits	HEQSF Level
APG5020F	Regional Planning Project .....	32	9
APG5023F	Regional Planning Theory.....	20	9
APG5024F	Planning Techniques III .....	12	9

#### Second Semester

Code	Course	NQF Credits	HEQSF Level
APG5051Z	Dissertation MCRP.....	120	9
	Total credits per year .....	<b>184</b>	

## Master of Urban Design [EM030APG12]

#### Programme Convener:

C Hindes, BLA *Pret* MLArch

This curriculum must be read together with the Degree Rules in the General Information section of this Handbook. Each student must complete all of the courses. (The curriculum may be taken over a period of two years by candidates who are employed.) For the completion of this degree students are required to complete a minimum of 156 credits at level 9 and 24 credits at level 8, as this degree consists of both level 8 and 9 courses.

#### First Semester

Code	Course	NQF Credits	HEQSF Level
APG5082F	Theory of Urban Design I .....	12	9
APG5083F	Urban Design Studio .....	48	9
APG4052F	Urban Design Representation.....	12	8
APG5084F	Research Methods for Urban Design .....	20	9
	*Approved Elective .....	12	8

#### Second Semester

Code	Course	NQF Credits	HEQSF Level
APG5085S	Urban Design Theory II .....	20	9
APG5086S	Urban Design Research Project.....	60	9
	Total credits.....	<b>184</b>	

## Master of Landscape Architecture [EM015APG06]

*Note: The structure of this degree has changed for 2019. This structure is valid for repeat and existing students only.*

A qualifying degree in landscape architecture provides learners with the knowledge, values and skills to enter the profession of landscape architecture. It is focused on developing independent critical inquiry in preparation for practice in a diverse and changing world. Students are given considerable freedom and support to develop a reflective, critical and speculative relationship to their work. The qualification is a pre-requisite for statutory registration as a Candidate Landscape Architect with the South African Council for the Landscape Architectural Profession (SACLAP), in terms of the Landscape Architectural Profession Act, Act 45 of 2000.

This curriculum must be read together with the Degree Rules in the General Information section of this Handbook. Each student must complete all of the courses.

*Note: The structure of this degree is changing in 2019. This structure is valid for repeat and existing students only.*

### First Year: First Semester

Code	Course	NQF Credits	HEQSF Level
APG4028F	Aspects of City Design .....	12	8
APG4054F	Landscape Systems Analysis.....	20	8
APG4031F	Landscape Representation .....	12	8
APG4036F	Landscape Architecture Studio I .....	16	8
APG4057F	Landscape Architecture Studio II .....	16	8

### First Year: Second Semester

Code	Course	NQF Credits	HEQSF Level
APG4030S	History & Theory of Landscape Architecture .....	12	8
APG4032S	Constructing Landscape Systems .....	20	8
APG4037S	Landscape Architecture Studio III.....	32	8
APG4047S	Plants & Design.....	12	8
	Total first year credits.....	152	

### Second Year: First Semester

Code	Course	NQF Credits	HEQSF Level
APG4053F	Landscape Architecture Practice .....	8	8
APG5025F	History & Theory of Landscape Architecture II.....	12	9
APG5026F	MLA Dissertation Technology .....	24	9
APG5029F	Landscape Architecture Studio IV.....	16	9
APG5087F	Landscape Research Methodology .....	12	9
APG5091F	Landscape Architecture Studio V.....	16	9
APG5092F	Landscape Innovation Seminar.....	8	9

### Second Year: Second Semester

Code	Course	NQF Credits	HEQSF Level
APG5052S	Dissertation MLA .....	120	9
	Total second year credits .....	188	
	Total credits .....	340	

## **Master of Philosophy specialising in Conservation of the Built Environment [EM027APG05]**

### **Programme Convener:**

Dr Naomi Roux

*Note: The Master of Philosophy specialising in Conservation of the Built Environment is offered over two years.*

This inter-disciplinary programme aims to equip graduates with a strong intellectual foundation in the field of built environment conservation, as well as the necessary professional skills in heritage resource management.

The programme is situated in a contemporary South African and global context in which heritage and conservation practices intersect powerfully with the politics of spatial transformation, urban change, social justice and development. Within this context, built environment professionals and managers are often required to work with or to take account of heritage and heritage resources. To do so productively requires a thorough technical and legal understanding of heritage resource management; but beyond this, the ability to grapple critically with the relationships between conservation, heritage, transformation and sustainable futures. We operate from the position that the built environment can only be understood as part of a network of social, political, commemorative, spatial, economic and other meanings. The programme aims to enable graduates to practice effectively in the field, supported by a thorough understanding of contemporary debates and issues in heritage and conservation.

### **First Year: first semester**

Code	Course	NQF Credits	HEQSF Level
<b>APG5074F</b>	Conservation in Transformative Contexts.....	20	9
<b>APG5080F</b>	Introduction to Conservation.....	20	9

### **First Year: second semester**

Code	Course	NQF Credits	HEQSF Level
<b>APG5081S</b>	Working with Heritage Resources.....	20	9
<b>AXL5203S</b>	Critical Issues in Heritage .....	24	9
	Total first year credits.....	84	

### **Second Year: first semester**

Code	Course	NQF Credits	HEQSF Level
<b>APG5077F</b>	Conservation and Development in Practice.....	20	9
<b>APG5078F</b>	Research Methodologies .....	20	9

### **Second Year: second semester**

Code	Course	NQF Credits	HEQSF Level
<b>APG5071S</b>	Minor Dissertation Design .....	60	9
	Total second year credits.....	100	
	Total credits.....	<b>184</b>	

**Master of Philosophy in Engineering specialising in Geomatics****[EM025APG08]**

EM025 MPhil in Engineering specializing in Geomatics is a Research Degree.

**Core Course**

Code	Course	NQF Credits	HEQSF Level
<b>APG5000W</b>	Dissertation .....	180	9
<b>END5050X</b>	Master's journal paper .....	0	9

**MSc in Engineering specialising in Geomatics****[EM023APG08]**

EM023 MSc in Engineering specializing in Geomatics is a Research Degree.

**Core Course**

Code	Course	NQF Credits	HEQSF Level
<b>APG5000W</b>	Dissertation .....	180	9
<b>END5050X</b>	Master's journal paper .....	0	9

Doctoral Programmes

**Doctor of Philosophy****[ED001APG01,APG02,APG08]**

ED001 Doctor of Philosophy is a Research Degree

**Core Course**

Code	Course	NQF Credits	HEQSF Level
<b>APG6000W</b>	Thesis (Geomatics) .....	360	10
<i>or</i>			
<b>APG8000W</b>	Thesis (Architecture & Planning) .....	360	10

Course descriptions are set out in the section Courses Offered. The course code abbreviation for Architecture, Planning and Geomatics is APG.

**Course Outlines****APG4007F INTRODUCTORY GIS**

24 NQF credits at HEQSF level 8

**Convener:** S Hull**Co-requisites:** APG4050W, APG4008F, APG4009F**Course outline:**

This course aims to provide the knowledge and skills in the fundamental concepts of Geographical Information Systems for scientists, especially in the fields of natural, earth and computer sciences. Instruction will take the form of formal lectures, seminars, practicals, assignments and self-study using internet resources and GIS software. Course content: GIS concepts, spatial relationships, topology, spatial and non-spatial data structures and algorithms, vector databases, raster data structures, data capture for raster GIS, spatial analysis using the raster data model, relational database management systems, data modelling, data display and presentation, theory of map projections.

**Lecture times:** 4<sup>th</sup> period Mon-Fri. Practical once a week Fri 14h00-17h00

**DP requirements:** Completion of practical assignments with a minimum average of 50% and to the satisfaction of the course convener, a minimum test average of 40% and an 80% attendance record.

**Assessment:** Tests 20%, practical assignments 25%, examination 3 hours 55% (sub minimum 40%).

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### **APG4008S** ADVANCED GIS

24 NQF credits at HEQSF level 8

**Convener:** Associate Professor J Smit

**Course entry requirements:** BSc(Hons) in GIS students: APG2018X, APG4007F, APG4009F

**Course outline:**

This course builds on the theory and skills developed in the Introductory GIS course. The aim of this course is to provide students with advanced level GIS skills and knowledge including GIS management issues, GIS application design, Internet GIS and 3D modelling. Course Content: multidimensional GIS and advanced data structures, spatial data infrastructures and metadata, distributed GIS, digital cartography, GIS application design and development using software engineering tools, GIS project management, spatial analysis, copyright and privacy issues.

**DP requirements:** Completion of practical assignments to the satisfaction of the course convener (test average of 35% or more) and an 80% attendance record.

**Assessment:** Tests, practical assignments, examination 3 hours (sub minimum 40%).

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### **APG4009F** COMPUTING FOR GIS

18 NQF credits at HEQSF level 8

**Convener:** Dr G Sithole

**Co-requisites:** APG4007F, APG4050W

**Course outline:**

This course aims to provide students with the fundamental scripting and programming skills they will need to enhance GIS software and develop stand-alone GIS applications using general software environments. It also aims to provide students with the skills needed to interface between GIS applications and other software applications. Course Content: Structure and Syntax of Visual Programming Language, development of GIS functionality in general programming environments, customisation of GIS using scripting languages, extension of attribute management through external DB links and SQL

**DP requirements:** Completion of practical assignments to the satisfaction of the course convener (test average of 35% or more) and an 80% attendance record.

**Assessment:** Tests, practical assignments.

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### **APG4020F** PLANNING THEORY & PRACTICE

8 NQF credits at HEQSF level 8

**Convener:** Assoc Prof T Winkler

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to develop an understanding of the evolution of the planning discipline; and changing values, concerns, methods, outcomes and plan forms over the last century.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 75% of the final result is based on the submission and assessment of a term paper, 25% based on group work.

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### **APG4021F** URBAN INFRASTRUCTURE

*Elective for students in BAS(Hons)*

12 NQF credits at HEQSF level 8

**Convener:** Dr N Odendaal

**Course entry requirements:** None

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**Co-requisites:** None

**Course outline:**

The focus of this course is infrastructure and human settlements as structuring elements in the on-going development and evolution of cities. The central purpose of the course is to introduce students to a range of factors which effect the growth and development of settlement space. The spatial scope ranges from regional systems of settlements to the organisation or structure of individual settlements. The emphasis is on breadth rather than the depth. Students examine how different actors influence urban systems and the role of infrastructure in enabling urban transition.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 80% on submission and assessment of term paper; 20% on presentation, submission and assessment of group seminar paper.

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### **APG4022F PLANNING PROJECT A**

32 NQF credits at HEQSF level 8

**Convener:** Assoc Prof T Winkler and Dr Nancy Odendaal

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course focuses on urban planning at the local and metropolitan scales and involves the development of descriptive, explanatory and, evaluative skills at both these scales. An introduction to visual and verbal communication techniques forms part of the course. Fieldwork is an integral requirement of the course.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on project work. Students are required to pass both Parts 1 and 2 of the course which each counts 50% of the total mark.

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### **APG4023S URBAN ECONOMIC DEVELOPMENT PROCESSES**

12 NQF credits at HEQSF level 8

**Convener:** Professor V Watson

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to develop an understanding of the economic (formal and informal) drives of contemporary urban development processes; relevant actors and institutions, the role of planning in the urban economic growth and change. Land/property-related factors shaping urban development are also covered.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The final result is based on 30% of the group product and 70% on an individual term paper.

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### **APG4024S PLANNING AND GOVERNMENTAL SYSTEMS**

12 NQF credits at HEQSF level 8

**Convener:** Dr N Odendaal

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to develop an understanding of the political and institutional context of planning; systems of representation and administration; local government financing and budgeting; integrated development planning; negotiation and public participation; "package of plans" approaches; public-private partnerships; and plan monitoring and evaluation.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on the submission and assessment of a term paper.

### **APG4025S REGULATORY & LEGAL FRAMEWORK**

12 NQF credits at HEQSF level 5

**Convener:** F Ogle

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to develop an understanding of the regulatory and legal framework. Topics include: planning law; introduction to South African law; administrative law; environmental law; current legislative framework for planning; development control; and options for a new planning framework.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 3- hour written examination counts 100%.

### **APG4026S PLANNING PROJECT B**

32 NQF credits at HEQSF level 8

**Convener:** Dr N Odendaal and Assoc Prof T Winkler

**Course entry requirements:** APG4022F

**Co-requisites:** None

**Course outline:**

The project focuses on urban planning intervention at both local and metropolitan scales and on plan implementation. Fieldwork is an integral requirement of the course.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on project work. Students are required to pass both Parts 1 and 2 of the course which each count 50% of the total mark.

### **APG4028F ASPECTS OF CITY DESIGN**

*Elective for students in BAS(Hons)*

12 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The course focuses on historically conceptualised concepts of urban structure and performance at the local area scale. It includes an introduction to city planning: conceptual framework; role of the planner; issues of planning; approach of the programme. Aspects of city design: the need for design and a design approach to planning; the process of design; exploration of fundamental ideas. Historical case studies: framework of evaluation; overseas case studies; local case studies.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on the submission and assessment of a term paper.

### **APG4029F NATURAL SYSTEMS**

*Elective for students BAS(Hons).*

12 NQF credits at HEQSF level 8

**Convener:** T Katzschner

**Course entry requirements:** None

**Co-requisites:** None

## 90 DEPARTMENTS IN THE FACULTY AND COURSES OFFERED

### **Course outline:**

This course aims to explore the relationships between nature and settlements and thinking deeply about environment humanity relationships. Central issues are substantive knowledge relating to land systems, water systems, air systems, life systems and the related design and planning implications. Ecology, holism and a systems understanding are powerful tools for understanding ourselves and our world which are fundamental to the course. It is an attempt to teach the basics about living Earth communities and to cultivate a living understanding of the natural world.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on the submission and assessment of a term paper.

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### **APG4030S HISTORY & THEORY OF LANDSCAPE ARCHITECTURE A**

12 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

This course aims to provide an overview of major design paradigms in landscape architecture through history, and forms the vehicle through which ideas in landscape architectural design are discussed. Iconic designers, gardens and landscapes are identified, and the principles, approaches and ideas characteristic of these are studied.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on a series of assignments.

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### **APG4031F LANDSCAPE REPRESENTATION**

12 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

This course aims to explore the way that different landscape materials, such as plants and topography, are represented differently from their architectural counterparts, and involves combined analogue and digital methods. The second part of the course teaches specific digital technologies including Rhinoceros & Grasshopper, Revit, GIS and Photoshop.

**Lecture times:** Refer to departmental timetable for further detail.

**DP requirements:** None

**Assessment:** 100% of the final result is based on the final project.

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### **APG4032S CONSTRUCTING LANDSCAPE SYSTEMS**

20 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

The course aims to follow on from Landscape Systems Analysis and focusses on the design of an intervention in the form of ecosystem design, comprising both soft and hard landscape elements. An ecosystem analysis is undertaken in the chosen study area concluding with an understanding of ecosystems performance. An urban ecosystem is then designed to maximise the ecological, social and economic opportunities inherent in ecological systems. Standard landscape construction materials and systems are also introduced as part of a suite of constructed landscape elements.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on a series of assignments, practicals and projects.

### **APG4035F PLANNING TECHNIQUES I**

12 NQF credits at HEQSF level 8

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course covers map work and cartographic/aerial photography interpretation; techniques of graphic presentation and communication, introduction to geographical information systems, and report writing.

**Lecture times:** Refer to departmental timetable for further detail.

**DP requirements:** None

**Assessment:** 100% of the final result is based on the final project.

### **APG4036F LANDSCAPE ARCHITECTURE STUDIO I**

16 NQF credits at HEQSF level 8

**Convener:** C Hindes

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

Landscape design studios provide an opportunity for students to respond to a brief to develop speculative individual design projects that can range from the highly speculative to the pragmatic, and are assessed on a combination of factors including design ideas and outcome quality, representational aspects, theoretical underpinning and technical resolution. In this first quarter studio, students undertake an analysis-focused urban design project in teams with planning and urban design students.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on the final portfolio review.

### **APG4037S LANDSCAPE ARCHITECTURE STUDIO III**

32 NQF credits at HEQSF level 8

**Convener:** C Hindes

**Course entry requirements:** APG4036F

**Co-requisites:** APG4034F or permission of course convener.

**Course outline:**

In landscape design studios, students respond to a brief to develop speculative individual design projects that can range from the highly speculative to the pragmatic, and are assessed on a combination of factors including design ideas and outcome quality, representational aspects, theoretical underpinning and technical resolution. Second semester studio undertakes a more developed studio project that lasts for the whole semester and involves a comprehensive professional process to design a local site with a social aspect, resulting in a technically-developed final package, using studio to develop skills in design development and documentation to meet SACLAP core competency requirements.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on the final portfolio review.

### **APG4038S PLANNING TECHNIQUES II**

12 NQF credits at HEQSF level 8

**Convener:** Assoc Prof T Winkler and Mr A Rhodes

**Course entry requirements:** None

**Co-requisites:** None

## 92 DEPARTMENTS IN THE FACULTY AND COURSES OFFERED

### **Course outline:**

This course covers quantitative methods, topics include: Scales of measurement, descriptive statistical methods, data summaries, introduction to statistical inference, tests of association, measures of correlation, simple linear regression. Qualitative methods: introduction to qualitative research methods (including case study methods; ethnographic methods; participatory action research (PAR); and oral histories and other qualitative methods).

**Lecture times:** Refer to departmental timetable for further detail.

**DP requirements:** None

**Assessment:** 65% of the final result is based on a STATS computer-based examination (with a sub-minimum requirement of 50%) and 35% on an assignment on the qualitative methods and proposal development.

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### **APG4039F ADVANCED HISTORY & THEORY OF ARCHITECTURE**

12 NQF credits at HEQSF level 8

**Convener:** M Fraschini

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

A survey of ideological and aesthetic terms of architectural theory and criticism by way of locating a close reading of contemporary texts within a broader social and cultural context. The course offers an advanced theoretical examination of the cultural and social role of design to enable evaluation and articulation of the interaction between theory and practice, and assessment of strategies for the making of architecture.

**Lecture times:** Refer to departmental timetable

**DP requirements:** 80% attendance; 100% of all hand-ins and participation in discussion.

**Assessment:** 50% Research paper 20% visual diary, 15% exercises, 15% seminar presentation and participation. Examination counts 50%, year mark 50%.

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### **APG4041S ADVANCED BUILDING TECHNOLOGY**

12 NQF credits at HEQSF level 8

**Convener:** F. Carter

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

This course aims to prepare students to understand the structural, constructional and material consequences and constraints on design decision-making. It investigates how the interaction of systems of structure, enclosure, environment, materials, and detailing informs spatial and formal expression in architecture. The course focuses on contemporary building and environmental technologies in relation to programmatic requirements and innovation.

**Lecture times:** Refer to departmental timetable

**DP requirements:** 80% attendance; 100% of all hand-ins, participation and discussions.

**Assessment:** Case study drawings and research reports 90%, seminar participation 10%.

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### **APG4042F ARCH DESIGN STUDIO I**

48 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

This course covers a range of complex design problems involving issues of the public and private nature of the urban and suburban context that calls for appropriate analysis and creative invention in the making of architecture. The topic, focus, requirements and duration of projects will be determined by the studio convener.

**Lecture times:** Refer to departmental timetable

**DP requirements:** 80% attendance; 100% of all hand-ins, participation and discussions.

**Assessment:** Oral presentation of architectural design project/s.

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#### **APG4043S ARCHITECTURAL DESIGN STUDIO II**

48 NQF credits at HEQSF level 8

**Convener:** I Low

**Course entry requirements:** APG4042F

**Co-requisites:** None

**Course outline:**

This course covers a range of complex design problems involving issues of the public and private nature of the urban and suburban context that calls for appropriate analysis and creative invention in the making of architecture. The topic, focus, requirements and duration of projects will be determined by the studio convener.

**Lecture times:** Refer to departmental timetable

**DP requirements:** 80% attendance; 100% of all hand-ins, participation and discussions.

**Assessment:** Oral presentation of architectural design project/s.

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#### **APG4044S PROFESSIONAL PRACTICE**

12 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course is an introduction to the knowledge and skills required to procure, administer and manage an architectural project. The course offers an opportunity to explore the essential elements of professional practice related to the role and function of the architect, differing modes of practice in the public and private sectors, the client-architect relationship, critical legislation influencing the role and conduct of architects, building procurement systems and conflict resolution. The course will also investigate the challenges facing the architectural profession, the meaning of professionalism and ethical and social problems within current architectural practice.

**Lecture times:** Refer to departmental timetable

**DP requirements:** 80% attendance; 100% of all hand-ins, participation and discussions.

**Assessment:** Written examination.

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#### **APG4047S PLANTS & DESIGN**

12 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to develop an understanding of plants and design. It covers vegetation types of Southern Africa and its limiting factors, and includes identification and utilisation of plant material, principles of permaculture and horticulture; planting plans, schedules and specifications.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on a series of practicals.

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#### **APG4048S ARCHITECTURE RESEARCH METHOD**

12 NQF credits at HEQSF level 8

**Convener:** Professor I Low

**Course entry requirements:** Bachelor of Architectural Studies

## 94 DEPARTMENTS IN THE FACULTY AND COURSES OFFERED

### **Course outline:**

This course is an investigation of practices and strategies that inform an analysis, synthesis and representation of ideas in architectural design research. The course offers a theoretical and practical introduction to research as an aspect of design by investigating activities that support and enhance architectural design, such as research proposal writing, case study analysis and the application of mapping, programming and siting studies in relation to architectural inquiry. It prepares students to undertake academic and design research in a critical and structured manner.

**Lecture times:** Refer to departmental timetable

**DP requirements:** 80% attendance and 100% submission of assignments

**Assessment:** Is based on 100% of submission and assessment of coursework assignments.

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### **APG4049F ASPECTS OF HISTORY & THEORY I**

12 NQF credits at HEQSF level 8

**Convener:** Associate Professor N Coetzer

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

Within the broad area of History and Theory of Architecture an architectural elective is offered each year of which the content and the coordinators vary depending on visiting lectures, research interests of staff and topical issues. Detailed contents will be published each year.

**Lecture times:** Refer to departmental timetable

**DP requirements:** 80% attendance and 100% submission of all assignments

**Assessment:** By submission and review of term paper or equivalent research project.

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### **APG4050W GEO-INFORMATICS PROJECT**

40 NQF credits at HEQSF level 8

**Convener:** Associate Professor Julian Smit

**Course entry requirements:** None

**Co-requisites:** None

#### **Course outline:**

This project aims to provide an opportunity to demonstrate ability to design, execute and report on a Geo-Information Science (GISc) problem. Students will start a GISc project at the beginning of the year, and will submit a planning and proposal document before the end of the first term. Students shall then perform their project plan and report their results and conclusions in a main project report, poster and oral presentation of their work in the second semester. Course Content: Presentation of the project plan and proposal, execution of the project, presentation of the results in written, poster and oral form.

**DP requirements:** None

**Assessment:** Project report

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### **APG4051Z SELECTED TOPICS IN APPLIED SCIENCE**

0 NQF credits at HEQSF level 8

#### **Course outline:**

Only for students who have been granted credit and exemption for courses taken elsewhere.

**Lecture times:** None

**DP requirements:** None

**Assessment:** None

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### **APG4052F URBAN DESIGN REPRESENTATION**

12 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to develop analytical and presentation skills (both manual/hand drawn and computer based) for use in the urban design studio. An innovative slant is necessitated by the dynamic nature of graphic software evolution and the breadth of communication options available to designers. Instruction is through both demonstration and the use of tutorials for independent development/combination of techniques to suit different design problems. It also an introduction to Geographical Information Systems (GIS).

The portfolio developed during the course of the semester needs to demonstrate an ability to successfully select and master appropriate communication/representation techniques in the context of presenting urban design work in a legible, graphic format.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The assessment of this course is based on the submission and presentation of projects and assignments through the semester as well as a final portfolio presentation.

**APG4053F LANDSCAPE ARCHITECTURE PRACTICE**

8 NQF credits at HEQSF level 8

**Course outline:**

This course aims to prepare students for the professional practice requirements of the South African Council for the Landscape Architectural Professions (SACLAP) candidate examination, and introduces different contractual arrangements and scenarios encountered in professional landscape architecture practice. It also introduces various legal, legislative and policy frameworks that form part of professional practice, notably environmental and planning laws and policies, at different levels of government.

**APG4054F LANDSCAPE SYSTEMS ANALYSIS**

20 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Course outline:**

The course focuses on developing an understanding of the composition and functioning of the urban landscape. Landscape ecology is initially used as the conceptual lens with which to identify and analyse the nature and performance of the landscape. The ideas of urban ecology and ecological urbanism are thereafter explored in order to understand the relationship between urban and ecological systems, with the purpose of identifying opportunities for ecosystem services and the development of productive and sustainable green infrastructure systems.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The formal assessment of this course is based 100% on an examination of the final portfolio by oral presentation and review.

**APG4056F ASPECTS OF HISTORY & THEORY II**

12 NQF credits at HEQSF level 8

**Convener:** Associate Professor N Coetzer

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims within the broad area of history and theory of architecture to provide an architectural elective course each year on a special topic.

**Lecture times:** Refer to departmental timetable.

**DP requirements:** 80% attendance and 100% submission of all assignments.

**Assessment:** By submission and review of term paper or equivalent research project.

**APG4057F** LANDSCAPE ARCHITECTURE STUDIO II

16 NQF credits at HEQSF level 8

**Convener:** Mr C Hindes

**Course entry requirements:** None

**Course outline:**

In landscape design studios, students respond to a brief to develop speculative individual design projects that can range from the highly speculative to the pragmatic, and are assessed on a combination of factors including design ideas and outcome quality, representational aspects, theoretical underpinning and technical resolution. The design process can be liberating for landscape designers, and in this second quarter studio, a series of art-inspired short exercises are used to represent the potentially invisible character of sites and thereby engage with them better through design, which is developed from abstract representations to resolved site designs in an intensive studio experience.

**Lecture times:** Refer to departmental timetable.

**DP requirements:** None.

**Assessment:** 100% of the final result is based on the final portfolio review.

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**APG5000W** MASTERS DISSERTATION GEOMATICS

180 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

A research project of a theoretical or practical nature, a critical review of a specified topic based on a comprehensive search of the literature or available data, development of an item of equipment or a technique involving novel features or advanced design, any other study acceptable to the Faculty.

**Lecture times:** None

**DP requirements:** None

**Assessment:** Dissertation 100%

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**APG5001Z** MASTERS DISSERTATION GEOMATICS

120 NQF credits at HEQSF level 9

**Course outline:**

A research project of a theoretical or practical nature, a critical review of a specified topic based on a comprehensive search of the literature or available data, development of an item of equipment or a technique involving novel features or advanced design, any other study acceptable to the Faculty.

**Lecture times:** None

**DP requirements:** None

**Assessment:** Dissertation 100%

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**APG5020F** REGIONAL PLANNING PROJECT

32 NQF credits at HEQSF level 9

**Convener:** T Katzschner and Professor V Watson.

**Co-requisites:** APG5023F

**Course outline:**

This advanced course aims to focus on regional and ecological planning issues at a regional scale and involves the development of descriptive, explanatory, evaluative and interventive skills, using a particular local region as a project site.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The final result is based on several phases of project work, 50% individual and 50% group work.

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**APG5023F REGIONAL PLANNING THEORY**

20 NQF credits at HEQSF level 9

**Convener:** T Katzschner and Professor V Watson.

**Course entry requirements:** None

**Co-requisites:** APG5020F

**Course outline:**

This advanced course aims to develop an understanding of the natural landscape framework of regional planning. Topics include: conceptual exploration of landscape processes and patterns; methods of regional landscape analysis and synthesis; and landscape management frameworks. The course then explores the regional economic development framework. Topics include: models of regional economic development; issues and debates; and SA national and regional economic development policies. The course concludes with the settlement and services framework of regional planning: processes of settlement formation. Topics include: resultant settlement patterns (size and spatial); major issues and debates relating to service provision.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on the submission and assessment of two term papers.

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**APG5024F PLANNING TECHNIQUES III**

12 NQF credits at HEQSF level 9

**Convener:** T Katzschner

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of this course is to provide students with experience in evaluating the environmental consequences of policies, programmes, plans and projects. Topics includes: the need and desirability for evaluating the environmental consequences of policies, plans and programmes, current and future environmental assessment tools, environmental impact assessment (EIA), strategic environmental assessment, sustainability assessment, public participation in environmental governance, biodiversity in impact assessment, social impact assessment, and environmental management plans.

**Lecture times:** Runs as a block week in the second week of the second semester.

**DP requirements:** None

**Assessment:** Based on a paper submission of assessment which counts 55% and a group work assignment which counts 45%.

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**APG5025F HISTORY & THEORY OF LANDSCAPE ARCHITECTURE II**

*Elective for students in BAS(Hons)*

12 NQF credits at HEQSF level 9

**Convener:** Dr J Raxworthy

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course explores a range of themes that characterise contemporary landscape architectural theory and practice, including the post-industrial, ecological urbanism and landscape infrastructure, exploring the similarities and differences between international and African readings of such themes. Comprising heavily illustrated lectures, this course aims to both provide precedents for students studio projects as well as develop a critical theoretical position that can inform their dissertations.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on a series of assignments.

**APG5026S** MLA DISSERTATION TECHNOLOGY

24 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course runs in parallel to the design dissertation and requires students to develop the technological aspects of their design project with specific attention to the physical manifestation of their design intervention. The course aims to provide an advanced exploration into the materiality and making of an aspect of the proposed landscape architectural intervention, as developed in the design dissertation.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on a series of assignments and projects.

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**APG5029F** LANDSCAPE ARCHITECTURE STUDIO IV

16 NQF credits at HEQSF level 9

**Convener:** Dr J Raxworthy

**Course entry requirements:** APG4032S, APG4037S or permission of course convener.

**Co-requisites:** APG5026F, APG5053F or permission of course convener.

**Course outline:**

In landscape design studios, students respond to a brief to develop speculative individual design projects that can range from the highly speculative to the pragmatic, and are assessed on a combination of factors including design ideas and outcome quality, representational aspects, theoretical underpinning and technical resolution. During the first semester, this quarter long studio course involves collaboration with architecture staff and students on a highly speculative, landscape-focussed series of smaller projects which are publicly exhibited.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% of the final result is based on the final portfolio review.

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**APG5051Z** MCRP MINOR DISSERTATION

120 NQF credits at HEQSF level 9

**Convener:** Professor V Watson and T Katzschner

**Course entry requirements:** APG5020F

**Co-requisites:** None

**Course outline:**

This course consists of a supervised dissertation on an approved subject usually chosen by the student.

**Lecture times:** None

**DP requirements:** None

**Assessment:** 80% of the final result is based on the submission and examination of a thesis document and 20% is based on a presentation of the final dissertation to a review panel.

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**APG5052S** MLA DESIGN DISSERTATION

120 NQF credits at HEQSF level 9

**Convener:** Dr J Raxworthy

**Course entry requirements:** APG5029F

**Co-requisites:** None

**Course outline:**

Utilising a design research methodology, the landscape architecture design dissertation is the culmination of students studies and allows them to develop a project of their own, derived from their particular interests and on a site of their choosing. The project typically comprises a research 'study'

in support of their project and involves site analysis, design generation, representation and resolution components, culminating in an exhibition and presentation.

**Lecture times:** None

**DP requirements:** None

**Assessment:** 100% of the final result is based on the final dissertation review.

#### **APG5061Z DISSERTATION PREPARATION**

0 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of this course is to allow the student to undertake preparatory work for the master's dissertation. Work required includes literature searches and reviews; identification of the research problem, objectives and hypothesis; consideration of research methodology; planning for the active research phase; and ensuring that research infrastructure (e.g. apparatus etc.) is or will be in place. The student should maintain regular contact with his/her supervisor in order to show evidence of suitable progress towards these aims. The supervisor must indicate satisfactory fulfilment of the course aims prior to the student proceeding to the dissertation.

**DP requirements:** None

**Assessment:** None

#### **APG5071S RESEARCH PROJECT**

60 NQF credits at HEQSF level 9

**Convener:** Dr N Roux

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

Students undertake a supervised research project on a conservation-related topic of their choice, resulting in a 25000-30000 word minor dissertation.

**DP requirements:** Satisfactory completion of all coursework

**Assessment:** 100% by examination of the dissertation

#### **APG5074F CONSERVATION IN TRANSFORMATIVE CONTEXT**

20 NQF credits at HEQSF level 9

**Convener:** Dr N Roux

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to place the practice and theory of conservation in the context of transforming contemporary environments. It explores the relationships and tensions between conservation and future-oriented spatial and social change, through a variety of discourses and disciplines that are central to the study and practice of conservation. These may include, among others: historical archaeology, architectural history, landscape studies, urban conservation, adaptive design and reuse, and public engagement practices.

**Lecture times:** Course runs on a block release system

**DP requirements:** 80% attendance of lectures and seminars and 100% submission of assignments.

**Assessment:** The year mark counts 100% of the final grade.

#### **APG5077F CONSERVATION AND DEVELOPMENT IN PRACTICE**

20 NQF credits at HEQSF level 9

**Convener:** Dr N Roux

**Course entry requirements:** None

## 100 DEPARTMENTS IN THE FACULTY AND COURSES OFFERED

**Co-requisites:** None

**Course outline:**

This course builds on and brings together previous material covered in the degree, particularly the research strategies developed in APG5078F (Research Methodologies) and the hands-on research and assessment skills developed in APG5081S (Working With Heritage Resources). Students are required to select a case study site related to their dissertation topic, and to unpack the implications of an imagined proposed development project on this site. The course equips students with an understanding of the technical and pragmatic constraints on development, familiarity with legal frameworks, as well as an ability to recognise and critically assess the power structures and ideological discourses that underlie these frameworks and institutions. It provides an opportunity to work on primary research and technical analysis related to the dissertation project.

**Lecture times:** Course runs on a block release system

**DP requirements:** 90% attendance of lectures and seminars and 100% submission of assignments.

**Assessment:** The year mark counts 100% of the final grade.

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### APG5078F RESEARCH METHODOLOGIES

20 NQF credits at HEQSF level 9

**Convener:** Dr N Roux

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to equip students to develop a research proposal for the minor dissertation to be written in the course of the second year. It includes input on academic research skills and methods, as well as an opportunity to develop and refine the research questions and methodological strategies for students' individual dissertations.

**Lecture times:** Course runs on a block release system

**DP requirements:** 80% attendance of lectures and seminars and 100% submission of assignments

**Assessment:** The year mark counts 100% of the final grade.

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### APG5079W DESIGN DISSERTATION

120 NQF credits at HEQSF level 9

**Convener:** Associate Professor N Coetzer

**Course entry requirements:** BAS(Hons)

**Co-requisites:** APG5088Z

**Course outline:**

A design dissertation which integrates self-initiated, self-motivated architectural major design project produced under supervision of an individual design research inquiry, grounded in a sound methodological base that supports the production of a research document as a basis for informal design discussion in the major design project.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** 100% on presentation and examination of design dissertation

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### APG5080F INTRODUCTION TO CONSERVATION

20 NQF credits at HEQSF level 9

**Convener:** Dr N Roux

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to provide an introduction to the intellectual, historical and legal frameworks that define the practice of conservation of the built environment. It provides a regional and global overview of the history of conservation; introduces students to some of the complexities of the

politics of heritage and conservation in postcolonial and decolonial contexts; and discusses some of the major policies and legislative frameworks that shape current conservation practice.

**Lecture times:** Course runs on a block release system

**DP requirements:** 80% attendance of lectures and seminars and 100% submission of assignments

**Assessment:** 50% of the examination result plus 50% of the year mark would make up the final grade.

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### **APG5081S WORKING WITH HERITAGE RESOURCES**

20 NQF credits at HEQSF level 9

**Convener:** Dr N Roux

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to bring together the theoretical, historical and legal frameworks covered in the previous three modules to develop a hands-on understanding of how these shape conservation practice. It introduces the basic primary research and interpretive skills required to understand and critically assess heritage resources, and equips students to apply the ideas encountered in previous courses to practical examples.

**Lecture times:** Course runs on a block release system

**DP requirements:** 80% attendance of lectures and 100% completion of assignments.

**Assessment:** By examination of an assignment (100%).

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### **APG5082F URBAN DESIGN THEORY I**

12 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The course aims to focus on historical and contemporary concepts of urban space design. It aims to investigate the value of urban design through considering performance at a local area/precinct scale. This includes: Introduction urban design, key moments in the history of urban design, the role of urban design relative to other professions of the built environment; the value of theory and conceptual frameworks; the value of morphological and typological analysis, the role of urban design in the global South. The role of urban design is animated via case study analysis (both international and local) and reflection on urban design practice.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The assessment of this course is based on the submission of a final/theme paper that counts 100% of the examination mark.

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### **APG5083F URBAN DESIGN STUDIO**

48 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This studio-based course aims to focus on strategic urban design intervention at a sub-regional to local scale. Sites are selected for a simulated projects, which then becomes the subject of focused urban design exercises. Urban design intervention is considered at both a catalytic and responsive level. Exploration is initially via engagement in groups and then proceeds to individual exploration and presentation of design ideas. Physical place making is considered in the context of social, political and economic constraints. Refinement and synthesis of ideas requires continual review of

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strategies and ideas presented in the studio. Parallel studios aimed at synchronised overlap with studios in architecture, planning and landscape architecture is encouraged.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The assessment of this course is based on 30% group work analysis and 70% individual work project.

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### APG5084F RESEARCH METHODS FOR URBAN DESIGN

20 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to equip the students with the tools to develop a research proposal for the Urban Design Research Project which is to be completed during the second semester. This research proposal will include a problem statement, the design of the research, the methodologies to be adopted, the sources to be consulted, interview strategies, a bibliography and the relation of the proposed research project to urban design discourse.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The assessment of this course is based on the submission of a final paper that counts 100% of the examination mark.

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### APG5085S URBAN DESIGN THEORY II

20 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This praxis-oriented, seminar-based course aims to offer students the opportunity to each identify appropriate urban design theories via a literature review and to relate theory to topical themes within the current urban design discourse. Learning happens both through independent reading and through engaging with lecturers and fellow students in discussing the relevance of the theories identified during seminars. Where appropriate, the relevance of theory is investigated and communicated via case study analysis. The widely recognized importance of reflective practice and the weak theoretical base of urban design is considered via selective engagement of part time tutors involved in practice and who engage in debate on theory whilst reflecting on the realities of contemporary practice.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The assessment of this course is based on 30% seminar presentations and 70% for the submission and assessment of a term paper.

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### APG5086S URBAN DESIGN RESEARCH PROJECT

60 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** APG5082F; APG5083F; APG4052F; APG5084F and one approved elective course.

**Co-requisites:** None

**Course outline:**

The research project aims to utilise the skills developed in the preceding course Research Methods for Urban Design. The aim of the research project is to develop and demonstrate integrated research and urban design skills, identify and address a well-defined urban design issue or question in the

context of a selected site, develop an ability to evaluate and analyse design orientated research findings according to explicit and well-defined criteria and to develop and defend a design response to the issue/question raised.

**Lecture times:** Refer to departmental timetable

**DP requirements:** None

**Assessment:** The assessment of this course is based 100% on the submission of a final research project and assessment by final portfolio presentation.

### **APG5088Z** THEORY AND TECHNOLOGY STUDIES

60 NQF credits at HEQSF level 9

**Convener:** Associate Professor N Coetzer

**Course entry requirements:** None

**Co-requisites:** APG5079W

**Course outline:**

This course is a self-initiated and self-motivated research project on architectural theory and technology, produced under supervision.

**DP requirements:** 80% attendance and 100% submission of assignments

**Assessment:** Research paper (100%)

### **APG5089S** ARTS OF SPACE

23 NQF credits at HEQSF level 9

**Convener:** Dr A Tomas

**Course outline:**

This course aims to bridge humanities and spatial and design sciences, by having as a starting point the notion that spatial transformation, and technical innovation, do not appear out of nowhere. They emerge from the crystallization of philosophical principles, or knowledge-making processes. This course therefore is about understanding the philosophical principles behind the spaces we have inherited, and how to tackle new methods to understand the coming into being of spatial and physical formations. The course is divided into three parts: 1) on the concept of design, in architecture, infrastructure and politics; 2) design of cities through planning, informal planning, counter-planning, and so on; 3) on design 'equipment', focused on methods and methodology. This course also aims to provide theoretical foundations for the practical component.

**Lecture times:** Refer to departmental timetable

**DP requirements:** Written course work and participation.

**Assessment:** 3 short 'response' papers to engage literature and visual materials brought into the class (30%), one long paper (40%), weekly journal reflecting on literature and new learning (20%), course participation and seminar presentation (10%).

### **APG5090W** CITY RESEARCH STUDIO

23 NQF credits at HEQSF level 9

**Convener:** Dr A Tomas

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to ground students in city research practice. It will also frame thinking on the development and rigour of urban studies, which is immersed in good questions, exploration which tests and ground truths these ideas, as well as discovery that the research process must open up. The City Research Studio also provides students a chance to engage with the representation of analysis in scholarly as well as public forms. The Studio will help students engage in this propositional work in the research and writing and dissemination processes. These are essential elements for rigorous trans-disciplinary urban studies work in African and broader global southern contexts.

**Lecture times:** Refer to departmental timetable.

**DP requirements:** Papers, journal and proposal.

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**Assessment:** Three papers (30%), narrative and visual journal on research practice in studio (25%), group contributions to exhibition (20%), thesis research proposal (10%), participation (10%)

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### **APG5091F** LANDSCAPE ARCHITECTURE STUDIO V

16 NQF credits at HEQSF level 9

**Convener:** Dr J Raxworthy

**Course outline:**

In landscape design studios, students respond to a brief to develop speculative individual design projects that can range from the highly speculative to the pragmatic, and are assessed on a combination of factors including design ideas and outcome quality, representational aspects, theoretical underpinning and technical resolution. Developing an African focus, this quarter long studio is built around a field trip to an African city that happens in the Easter break, followed by a resultant studio project. Previous trips have travelled to Kampala in Uganda and Addis Ababa in Ethiopia. A local studio brief will also be offered.

**Lecture times:** Refer to departmental timetable.

**DP requirements:** None

**Assessment:** 100% of the final result is based on the final portfolio review.

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### **END5128W** MINOR DISSERTATION URBAN STUDIES

90 NQF credits at HEQSF level 9

**Convener:** Professor S Oldfield

**Course entry requirements:** None

**Course outline:**

Students will complete a suitable research proposal in consultation with an appropriate supervisor. After approval of the proposal, students will undertake a research project demonstrating the application of theory to empirical issues in the research area of urban studies.

**DP requirements:** Passing the coursework component of the MPhil specialising in Urban Studies.

**Assessment:** Dissertation 100%.

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### **APG6000W** PHD IN GEOMATICS

360 NQF credits at HEQSF level 10

**Convener:** TBA

**Course outline:**

A PhD thesis is required to be an original, coherent and consistent body of work which reflects the candidate's own efforts. The thesis may not be more than 80 000 words. A candidate will undertake research, and such advanced coursework as may be required, under the guidance of a supervisor or supervisors appointed by Senate.

**Lecture times:** None

**DP requirements:** None

**Assessment:** Written work counts 100%.

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### **APG7000W** MASTERS DISSERTATION ARCHITECTURE & PLANNING

180 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** Hons

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### **APG7001W** DISSERTATION ARCHITECTURE & PLANNING

120 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** Hons

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**APG7001Z** MASTERS ARCH & PLANNING DISS

120 NQF credits at HEQSF level 9

**Convener:** TBA

**Course entry requirements:** Hons

**Co-requisites:** None

**DP requirements:** None

**Assessment:** 100% submission of dissertation

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**APG8000W** PHD IN ARCHITECTURE & PLANNING

360 NQF credits at HEQSF level 10

**Convener:** TBA

**Course outline:**

A PhD thesis is required to be an original, coherent and consistent body of work which reflects the candidate's own efforts. The thesis may not be more than 80 000 words. A candidate will undertake research, and such advanced coursework as may be required, under the guidance of a supervisor or supervisors appointed by Senate.

**Lecture times:** None

**DP requirements:** None

**Assessment:** Written work counts 100%

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**APG5087F** LANDSCAPE RESEARCH METHODOLOGY

12 NQF credits at HEQSF level 9

**Course outline:**

Landscape architecture practice uses very diverse methods to suit different briefs, including some that are scientific, others social and more novel methods like design research. This course introduces general theories and models of methodology, examines how they are used in landscape architecture and encourages students to treat methodology design as a creative process. This provides the basis for students to begin developing their dissertation brief and methods to suit their interests, a dissertation proposal and its presentation a key outcome of the course.